

Docket No.: 06007/40002  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Richard Bates

Application No.: 10/534,147

Confirmation No.: 4807

Filed: December 15, 2005

Art Unit: 3652

For: EXCAVATING AND LOADING MACHINE

Examiner: D. W. Underwood

**DECLARATION OF SIMON JOHN RATCLIFFE  
UNDER 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Sir:

1. I, Simon John Ratcliffe, declare that I have reviewed the disclosure and the claims of the above-identified patent application and that I am familiar with the subject matter disclosed therein.

2. I have earned a Higher National Diploma in Agricultural Engineering from Harper Adams University College, Shropshire, England, and I am a member of the Institute of Agricultural Engineering. I have worked in this environment for 22 years.

3. I am currently employed as the Chief Engineer of the Backhoe Loader Division of J.C. Bamford Excavators Limited.

4. I submit this declaration to address issues raised in the office action dated June 18, 2008, in the above-identified patent application, Ser. No. 10/534,147 ("the present application"). One issue is whether one of ordinary skill in the art would look to the teachings of U.S. Patent No. 5,193,658 ("Tellden") cited by the Examiner to modify the teachings of U.S. Patent No. 5,265,995 ("Beck").

5. I have reviewed the Tellden reference and, in my opinion, one skilled in the art would not look to the Tellden reference to modify the Beck reference. In particular, the disclosure and claims of the present application are directed toward a combined excavating and loading machine, in which a human operator sitting in an operator's cab controls either a loading arm assembly or an excavating arm. Such a machine is drivable to a work site, and then the excavating arm as well as the loading assembly are operated by the human operator. By comparison, the Tellden reference is directed to a computer-controlled robotic arm that is mounted to a stationary base in a factory setting, and which can be programmed to perform robotic operations. Further, the focus of Tellden appears to be providing back-up mechanical stops for the robotic arm, and these safety devices come into play when there is a computer or programming malfunction, such as when the computer commands too much rotation. A stationary, computer-controlled industrial robotics device is not in the same field of endeavor as a combined excavating and loading machine that is driven to a work site and controlled by a human operator. Further, a person of skill in the relevant art of combined excavating and loading machines who is seeking to provide a combined excavating and loading machine with greater operational flexibility, simply would not seek the solution in a stationary industrial robot having a computer-controlled rotating arm.

6. The teachings of the Tellden reference appear to be irrelevant with respect to the primary Beck reference. Specifically, the Tellden reference uses a computer program to control the movement of the robotic arm, and the computer program is arranged to electronically limit the rotation of the robotic arm to a specified operational range. Although Tellden provides mechanical stops, these mechanical stops appear to function as a back-up safety device. These stops appear to only come into play when the computer control experiences some kind of malfunction. Therefore, as outlined at column 3, lines 56-68 of the reference, the stops of the Tellden device are arranged to immediately shut down the industrial robot in the event the arm comes into contact with the backup mechanical stops. Presumably, after contacting the back-up mechanical stop, the robotic arm must be recalibrated or rebooted to restore correct computer control or to determine why the arm malfunctioned. As a result of the character and purpose of the mechanical back-up safety stops of the Tellden reference, one of ordinary skill in the art of excavating and loading machines would not look to the Tellden reference to solve the problem of providing a

primary stop for a excavating/loading machine which limits rotation of a cab to less than 300 degrees.

7. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application involved or any patent issuing thereon.

Dated: 15/12/08

  
Simon John Ratcliffe